

Volume 98 Number 7 July 1998

Editor's Corner:

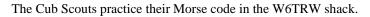
As I write this, Field Day has yet to occur, so a complete report on the results of Field Day will have to wait until next issue. However, we have a report on the June VHF QSO Party and some photos from the Dayton Hamvention, and other club activities. Remember that the next two club meetings will be at noon in Pollywog Park at the white gazebo. See you there for some free lunch and raffle prizes, and swapping of photos and stories from Field Day.

Jim Harrison K6OUE

Cub Scouts Visit the W6TRW Shack

On the evening of June 8, a group of Tiger Cub Scouts came to visit the TRW Amateur Radio Club. The visit was organized by Dave Nelson AB6DU, and the host at the S Shack was Greg Shreve KE6YEX. Robert KF6EXC documented the event with photos. The scouts talked to a station in Pennsylvania on the HF radio, got a quick lesson in Morse code, and talked to and saw hams in San Diego and Riverside Counties over our amateur television station. They got really excited at being on TV. Both the scouts and the parents said they had a great time.







A lot of excitement at seeing themselves on TV. They wouldn't let the control op, K6OUE, turn it off!

TRWARC Monthly Calendar of Events

First Tuesday of each month	5:30 pm	Executive Board Meeting, R4/2041 (All Club Members are invited)
Second Tuesday of each month	12:00 noon	Club Meeting Pollywog Park, the white gazebo near Manhattan Beach Blvd.
Second Tuesday of each month	12:00 noon	Emergency Communications Team Meeting R3 Emergency Operations Center
Last Saturday of each month	7:00 am	TRW/ARC Swap Meet Marine and Aviation (Northeast Corner)
After the Swapmeet	12:00 noon	T-Hunt Swap Meet Parking Lot - 144.72 MHz

Weekly Events

Every Monday Night (Except the 1st & Holidays)	7:30 pm	Disaster Communication Systems (DCS) Net DCS Members: Check in on 2 Meter Repeater
Every Wednesday	12:00 noon	ECT Net on 2 meter Repeater All Amateurs Welcome
Every Mon, Wed, Fri	2:00 pm	TRW Retirees Net 7185 KHz
Every Friday Morning	7:30 am	TRW Amateur Radio Club Breakfast Building S Cafeteria - Everyone is invited Talk-in on 2 Meters

Other Events

Computer Fair (previously The Computer Marketplace Computer Shows) Hours: 10:00 to 17:00

POMONA \$8 admission

Live Broadcasts: KFI-Jeff Levy "On Computers", KZLA, Y-107FM

May 9 & 10 (Sat. & Sun.)

May 30 & 31 (Sat. & Sun.) Fairplex Exposition Complex Exit Highway 10 at Fairplex Drive.

Go north to McKinley Avenue, turn right. Turn left on White Avenue to Gate 14.

RESEDA \$3 admission

May 2 (Sat.)

Sherman Square Entertainment Center From the 101 Freeway take the Reseda offramp, go north to Sherman Way and turn right. Go one block to Canby Street. 18430 Sherman Way.

BUENA PARK \$5 admission

May 3 (Sun.)

Sequoia Conference Center Take the Beach Blvd. exit off the 91 Freeway.

Go one block north to 7530 Orangethorpe.

All Shows Open to the Public 10:00 a.m. to 5:00 p.m.

Call for more information (408) 778-5200 or 800-800-5600 Fax# (408) 779-1374

Other Ham Swap meets:

<u>Inland Empire ARC</u> - 2nd Sat. ea. mo. @ A.B. Miller High School, Walnut & Olenander in **Fontana** Talk-in 145.480 (-600 pl=77.0hz)

El Cajon ARC - 1st Sat. ea. mo. @ Santee Drive-in Theater, Woodside Ave. @ Hwy 67 in Santee

Notes from the Executive Board Meeting

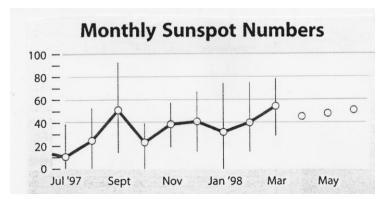
The monthly TRW Amateur Radio Club Executive Board Meeting was held on June 2, 1998 at 5:30PM. Following are some notes from the meeting.

- Vice President July and August meetings will be lunch time meetings in place of the regular evening meetings. Location will be Pollywog Park in Manhattan Beach, at the white gazebo.
- Treasurer Income from the last swap meet was better than average.
- Swap Meet Mgr.- The swap meet went fine.
- Membership Chairman 6 new members, 151 total members. Approved 2 non-employee members.
- Publicity There will be an SEA club fair in July. Need volunteers to man the booth. We are going to try to take photos of Field Day from the air. Greg Martens has the airplane, Robert Manriquez will be the photographer, and will also take video and photos on the ground.
- S Shack Bought a new Alpha 87 1500W HF power amplifier! Found one that was barely used for \$1500 less than the new price. Come into the shack and check it out.
- ECT What was reported last month about the R3 ECT shack moving has now changed. It is still moving but is now moving directly downstairs to a slightly larger room. By the time you read this, it should be set up.
- New Business Steve Lambert will check into getting the latest upgrade for our contest logging software,
 CT, which should have changes for the new Field Day rules.

Notes from the Monthly Club Meeting

The monthly TRW Amateur Radio Club Meeting was held on June 9, 1998 at 5:30PM at the Round Table Pizza Parlor. Following are some notes from the meeting.

- The President, Rich Sauer started the meeting by having everyone introduce themselves. He then covered the following items:
 - The VHF QSO Party next Saturday. The Field Day 6m antenna is temporarily installed on the roof of Bldq. S.
 - The SMIRK 6m International Contest is in 2 weeks.
 - John Cheatham, KE6OJM, our Technical Chairman is in the hospital. Get well soon, John!
 - R3 Shack moving downstairs. Moving party Saturday. Facilities moving things on Monday.
- Dave Nelson had the following items to report:
 - SEA membership drive coming up.
 - Bought a new Alpha 87 1500W HF power amplifier for the S Shack.
- Elizabeth Kunkee showed a TRW video about MERC, a proposed solution for adaptive satellite antennas.
 The concept is to have multiple intelligent antenna reflector elements floating in space and located only by magnetic fields!
- · Lots of discussion about Field Day.
- Door prizes:
 - \$25 Jun's gift certificate won by W6EKK
 - \$25 Best Buy gift certificate won by KE6YEX
 - \$50 Jun's gift certificate won by WA6FEL



Paul Lukas N6DMV provided this from the June 1998 issue of Sky and Telescope.

The range of minimum and maximum daily numbers (vertical lines) and monthly means (connected points) are shown for the nine most recent months. There are also three months of predictions. Daily numbers are available at http://www.oma.be/KSB-

ORB/SIDC/index.html

June VHF QSO Party

Results by Jim Harrison, K60UE

The 1998 ARRL June VHF QSO party was on June 13 and 14. We had pretty good success operating from the Building S shack. The contest was from 11AM Saturday to 8PM Sunday, but we only operated until 8PM Saturday. So if we had more operators we could have gotten another 24 hours of operation in! Jim K6OUE operated 2 meters and up, Greg KE6YEX operated 220 MHz for awhile, and extra special thanks go to Blaine N6ZAY who operated 6m all day Saturday, and he isn't even a club member!

Thanks to all of the people who contacted us during the contest. It was nice to hear those familiar call signs and voices. Special thanks to Frank KC6ABS for his rover efforts.



For this contest we temporarily set up the Field Day 6m beam on the roof of Building S. It is a Cushcraft five element yagi, and we mounted it on a tripod on the roof with a rotator so we could rotate it from down in the shack. You can see some of the junk we piled on the base to make sure it wouldn't blow over. It was about 15 feet off the roof, so it was probably still being affected by the metal structures on the roof, but it seemed to work reasonably well. The week before the contest, I talked to N6CA on 6m and he told me that our antenna is not very directional, the boom is too short for 5 elements. He said it actually works better as a 4 element yagi. This was borne out by our experience in the contest, Blaine said that the antenna was not very directional at all. But Blaine still did pretty well even though there were not too many 6m openings. He did get some contacts in Idaho, Colorado, and Mexico. Thanks go to Greg KE6YEX and Fred KF6BTU for helping to move the 6m antenna from the Conex boxes to S, and setting it up.

Among the most interesting contacts during the contest, K1KIP was on a boat off of Santa Rosa Island in grid square CM93. This grid square is all ocean with just a little chunk of Santa Rosa Island, so it is not one you usually hear. We contacted K1KIP on 2m SSB and 6m SSB. Also, N6XQ who lives in San Diego, was in Ensenada in DM11. We contacted him on 2m SSB and 220 MHz FM, I was surprised we could make the FM contact. Blaine made a contact with XE2HWB in DL44 which is way down in Mexico somewhere.

Our results are shown below. The final score is the total number of points multiplied by the total number of grid squares.

Band	QSOs	Points/QSO	Points	Grid Squares	Final Score
6m	75	1	75	16	
2m	54	1	54	6	
220 MHz	19	2	38	5	
440 MHz	35	2	70	4	
1.2 GHz	7	3	21	3	
Totals	190		258	34	8772



Jim K6OUE operating 2m, and Blaine N6ZAY operating 6m.

The results won't be published until the December issue of QST, but to put our score in perspective, in last year's contest, the top single operator in Los Angeles County got a score of 23,920. And the top multioperator scored 201,790. Nationwide, the top single operator scored 395,031, the top limited multioperator (4 bands only) scored 547,143, and the top multioperator station scored 1,164,030. East coast stations generally win the VHF and UHF contests because there is a large population spread all the way up and down the coast. Here the population is concentrated in a few large cities, and the rest of the west is very sparsely populated, plus we are surrounded by very high mountains. However, N6RMJ managed to win the Limited Multioperator category in the 1998 January VHF Sweepstakes with a score of 245,841. The Downey Amateur Radio Club, W6TOI, has been very active lately and they would be a good group for us to compete against. In the January contest they got a score of 30,402. We have won nationally in our class in Field Day, and you can see the size of the effort that it takes. I think it would take that kind of effort to win any of these other contests. It is also difficult from the S Shack because we are down at sea level, the winning efforts go to the mountain tops. We also don't have the best antennas at the shack for these bands. But I think we could still be competitive if we just had enough operators.

Craig N6ED operated with his own 2m mobile rig from the top of Palos Verdes. He was able to make contacts all over the lower half of California and into Arizona and Nevada on 2m with just that added bit of altitude.

Contest Corral

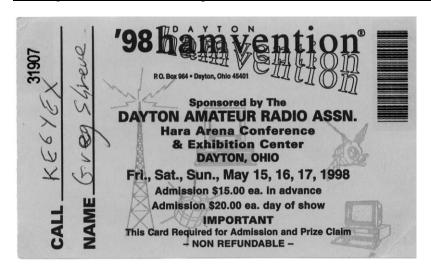
Let's hear about member's contest experiences, either with the club, on their own, or with other groups!

Pete Livingston W3CRI has been learning how to use the RTTY setup in the shack and sent in this note.

On Sunday morning, June 14, I got W6TRW into the RTTY contest just to see how we'd do. Did allright, worked 3 or 4 Japanese RTTY stations distributed throughout the main island including one in Tokyo (599 sigs!) and one station in Penambang, Sumatra also on RTTY. Used the new ALPHA amplifier with no major problems. However, the Kenwood ALC must not exceed its operating range, otherwise the startup transient kicks the ALPHA amplifier into a fault mode.

Pete W3CRI

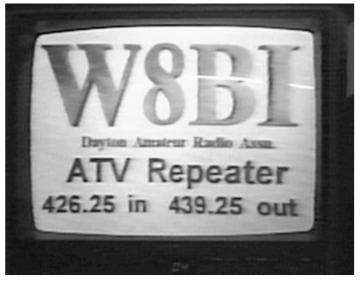
A Report from the Dayton Hamvention (by Greg Shreve KE6YEX)



The 1998 Dayton Hamvention took place May 15-17, 1998. I attended this event this year and last year, 1997. Hamvention is just about what one would expect – lots of exhibitors, and a big swap meet. Unfortunately, I did not manage to attend any of the tutorials they hold.



Arena floor at Dayton Hamvention. A busy place, as you can imagine, but this is probably only 10% of the total vendor exhibit area.





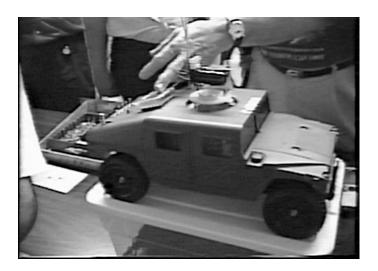
Friday ATV Meeting

One event that I do manage to get to at Hamvention is the ATV meeting. In amateur radio, the term ATV means "amateur television" rather than "all-terrain vehicle." On Friday night at Hamvention, the Dayton ATV group holds an open meeting which is well attended. Here are a few pictures from that meeting.

ATV identification screen for the Dayton area ATV repeater. As you can see, it is an in-band 70 cm repeater. The repeaters out here in southern California are all crossband repeaters, as far as I know.

A videotape of a balloon launch was presented. An amateur TV camera was sent aloft with the payload. Balloons often carry ATV as well as whatever beacons, telemetry and relays that hams normally put on balloons. This shot from the ATV video link shows the weather balloon bursting when it reached an altitude of something greater than 100,000 feet.

Last year, one of the ATV presentations talked about adapting the RF Link Wavecom Jr. video transmitter/receiver for amateur TV use. This year, a clever amateur put a small video camera on a radio-controlled HMMV, using the Wavecom transmitter. This looks like fun.



Radio controlled car with video camera on top. Video camera has two channels of the R/C for azimuth and elevation movement. The video transmitter is the 2.4 GHz FM video transmitter module from the RF Link Wavecom Jr., which transmits in the ham band. The builder of the car is pointing to the transmitter module.





The Hamvention Swap Meet

Here's one subject W6TRW members know a lot about. The Dayton swap meet is big, but seems only maybe three or four times the size of the TRW swap meet. It really does not take more than about 3-4 hours to go through it.

Typical scene at a typical Dayton Hamvention swap meet.

Some swap meet vendors come ready for rain due to misfortunes in past years when the Hamvention was held in April, but in fact, in the last two years when the Hamvention has been held in May, the weather has been great.

Buses and Vans

Parking for Hamvention is easy -- just park at one of the malls nearby and take the shuttle bus. Leaving Hamvention is less easy -- the lines for the outgoing buses are long for the nearby malls. If you can stand a longer bus ride, park at the most distant mall. There is virtually no line for the outgoing buses for the distant malls.



The Dayton Amateur Radio Association van.



Interior shot of the DARA van.

For Sale

YAESU FT-101ZD HF Radio with external VFO. \$400. Got all the manuals in case anyone wants to kn6ow. Bryan DeAro KN6OW (310) 812-4789

KENWOOD SMC-33 Speaker Mike, fits most Kenwood HT's. Has 3 programmable buttons to control radio. Like new. \$65.95 new, will sell for \$45. Jim Harrison K6OUE (310) 814-1937

Wanted

A 2m or 440 mobile or base station with ~10W transmit power. Cheap is good. Stuart Gorsky KF6QHV (310) 812-0255

DX News

If anyone has had some interesting QSO's either from the club station or home, let us know!

Craig Gullickson, N6ED asked the club to subscribe to the Southern California DX packet cluster. The DX packet cluster is a collection of 2m packet nodes that are all connected to form a "cluster." The software is called "Packet Cluster" by PAYL software which has a bunch of useful commands to use for spotting your own DX as well as receiving spots. WWV information is also posted and comments from locals on DX conditions. The closest node to is LAXDX (K6EXO1) on 145.69 MHz. For a list DX cluster nodes of http://www.primenet.com/~scdxc/scalpacnet.html. Once connected to the node, a simple help command will give you all the necessary info you need.

Also, a free DX web site is located at http://oh2aq.kolumbus.com/dxs/. It has current reports of DX stations heard on the air, beacon reports, etc.

-VHF-

Our temporarily mounted 6m beam on building S got some good use besides the VHF contest:

On June 15 at lunch time, Jim K6OUE contacted N7TGF in CN88 on 6m. This grid square straddles the Washington State - Canadian border. He was running a 6 element Cushcraft and 100W.

Craig N6ED caught a very short 6m opening on the evening of June 21 in the S shack. He had a QSO with KL7NO near Fairbanks Alaska in grid BP54 at 0440Z on 50.150 MHz. Just as he was finishing his QSO, the opening was gone and the station disappeared.

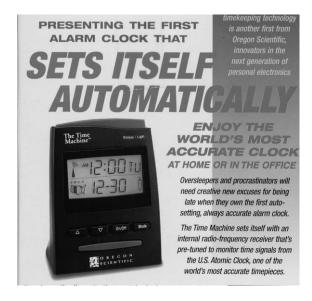
Craig also saw this on the DX Packet Cluster: a new 2m overland distance record was made on May 29 at 0111Z. A contact between W4UE in Florida (EM90) and KF7UV in Nevada (DM08) on 2m SSB.

An Atomic Clock for \$30?

Here is a neat gadget for everyone's ham shack. It is a clock that receives signals from the National Institute of Standards and Technology (NIST) in Boulder Colorado, and automatically sets itself to the US atomic clock standard. I remember years ago that Heathkit had a clock that picked up WWV and displayed the time, but it cost hundreds of dollars. Now the miracle of integrated circuits has made this technology more affordable. There are several clocks like this available now, but this is definitely the cheapest one I have seen. It is called the Time Machine and is made by Oregon Scientific. They are available from the Damark catalog for \$60, but Greg Shreve KE6YEX saw a huge pile of them on sale at Fry's for only \$30 a couple months ago. The next time he went in, they were almost all gone, so he bought one for himself and picked one up for me.

It is a very small, LCD clock that runs on two AAA batteries. It has a small ferrite antenna on a three foot cord. It picks up WWVB which transmits on a carrier of 60 KHz. (No, that's not a typo, that's KHz. I figure that is a wavelength of about 5000 meters!) The manual says that it may take up to 72 hours for it to set itself the first time it is turned on, but after I put the batteries in and I was reading the manual on my kitchen table, after about 10 minutes I looked up and it had set itself to the correct time and date. I verified it later with WWV on my shortwave radio, and it was

right on. Since it is battery powered, it can be carried around the house to set all of your other clocks. It is even supposed to automatically change to and from daylight savings time on the proper day. It has an alarm, and a luminescent panel that lights momentarily by push button so you can see it at night. The only drawback for us hams is that it cannot be set to display UTC, it can only be set to display Pacific, Mountain, Central, or Eastern time. But for the cost, you can't beat it for a handy time reference.



TRW AMATEUR RADIO CLUB

ELECTED OFFICERS

President	Rich Sauer	N6CIZ	R9 / 2873	(310) 813-5869
Vice President	Elizabeth Kunkee	KS4IS	D1 / 1024	(310) 813-0524
Secretary	Pat Anderson	KB6YPI	R7A /1265	(310) 813-6874
Treasurer	Steve Lambert	KF6KIC	R6 / 2529	(310) 812-5019
APPOINTED STAFF				
447 Repeater Autopatch Activities Chair/Asst Swapmt Crosstalk Editor Emer. Comm. Coordinator Librarian/Asst. Postmaster Membership Chairperson Past President Publicity Chairperson QSL Manager S.P. Packet/Internet Sysop SEA Representative Swap Meet Manager Technical Chairperson Training Chairperson Trustee of W6TRW License	Pat Anderson	KB6YPI	R7A /1265	(310) 813-6874
	Greg Martens	N6RRY	M1 / 1275	(310) 813-4049
	Duane Park	WA6EIK	M2N / 1368B	(310) 813-4219
	Rick Ervin	KD6OZD	R3 / 1098	(310) 812-2039
	Steve Papa	KO6VF	O2 / 1715	(310) 812-5305
	Dave Nelson	AB6DU	R8 / 2144	(310) 813-9775
	Bob Briggs	KD6WYQ	M7 / 2939	(310) 813-9775
	Dave Nelson	AB6DU	R8 / 2144	(310) 813-975
	Bryan DeAro	KN6OW	120 / 1020B	(310) 813-975
	Chris Wachs	WA2KDL	R7A / 2100	(310) 813-1506
	Nina Whiddon	KN6FL	O1 / 2020	(310) 813-1506
	Rich Sauer	N6CIZ	R9 / 2873	(310) 813-5869
	John Cheatham	KE6OJM	R9 / 2477	(310) 813-5903
	Bryan DeAro	KN6OW	120 / 1020B	(310) 813-5903
	Elizabeth Kunkee	KS4IS	D1 / 1024	(310) 813-0524
TRW/ARC Hotline (Club Answering Machine) W6TRW 2 Meter Repeater (Open Repeater) W6TRW UHF Repeater (Open Repeater / Closed Autopatch) W6TRW-3 Packet Radio Internet Gateway and BBS (1200 Baud Port) W6TRW Internet Home Page (310) 813-8569 145.32 (-600) PL 114.8Hz 147.00 (-5 MHz) PL 100 Hz 146.745 (-600)				

TRW Amateur Radio Club S/1156 One Space Park Redondo Beach, CA 90278

FIRST CLASS

Deliver To:	